

REMARKS

Status of the Claims

Claims 1-49 are pending. Claims 35-46 are allowed.

35 USC §102(e) Rejection

Claims 1-10, 13-29, 34, and 47-49 are rejected under 35 USC §102(e) as allegedly being anticipated by Liang et al (USPN 6,831,770 B2). The rejection is traversed.

Claim 1 is directed to an electrophoretic display which comprises more than one layer of display cells filled with electrophoretic fluids. The present invention is illustrated in Figures 2-5.

The Examiner states, “Liang et al discloses (refer to figure 8) an electrophoretic display which comprises more than one layer (two conductive layers 86 and 87) of display cells (80) filled with electrophoretic fluids (column 10, lines 55-67, column 11, lines 1-8).” Although Figure 8 of Liang et al shows two conductive layers 86 and 87; it only has one layer of display cells. This one layer of display cells is sandwiched between the two conductive layers. Liang et al do not disclose an electrophoretic display comprising more than one layer of display cells, which display cells are filled with electrophoretic fluids. It should be noted that the “more than one layer of display cells” in the present application are not conductive layers whereas the layers 86 and 87 in Liang et al are conductive layers.

As illustrated in the Background section of the present application, an electrophoretic display typically has a layer of display cells sandwiched between two conductive layers and the display cells are filled with an electrophoretic fluid comprising charged pigment particles dispersed in a solvent. The charged pigment particles would move to generate images when different voltages are applied to the two conductive layers. The layers 86 and 87 in Liang et al are the two conductive layers. The “more than one layer” referred to in the present invention are the display cell layers, not the conductive layers.

The Examiner further argues, "Liang et al also show in figure 6, precursors (60) in figure 6 (i.e., two layers in an electrophoretic display) (column 11, lines 15-20)". The cited passage merely discloses coating a layer of thermoplastic, thermoset, or their precursors (60) on a conductor film; this layer is then embossed by a pre-patterned male mold. The cited passage does not disclose more than one layer of display cells filled with electrophoretic fluids.

Contrary to Liang et al, the present invention is directed to one or more layer of display cells. In Figure 2, the display has an upper display cell layer (21) and a lower display cell layer (22). The cells of the two display cell layers are individually sealed with a sealing layer (23). The two layers of display cells are arranged in a staggered fashion and the sealing sides of the two layers face each other. The two display cell layers are sandwiched between a top transparent conductor film (24) and a bottom conductor film (25). (See application at page 9, paragraph [0041].)

At page 9, paragraph [0043], the application describes that the two-layer or multilayer of display cells of electrophoretic display allows the use of a cell with a lower payload (a lower aspect ratio and a lower ratio of opening area to total area) to achieve a high contrast ratio with a higher reflectivity at the Dmin state, which significantly improves the release properties of the embossing process and reduces the cost and degree of difficulty of the mold making process.

Because Liang et al do not teach two or more layers of display cells filled with electrophoretic fluids, the reference does not anticipate Claim 1.

The above discussion also applies to other independent claims, Claims 25 and 28.

Accordingly, the 102(e) rejection of Claims 1-10, 13-29, 34, and 47-49 should be withdrawn.

Objection to Claims 11, 12 and 30-33

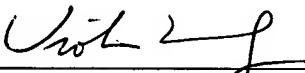
Since Claims 1 and 28 are allowable, Claims 11, 12 and 30-33, which are directly or indirectly dependent from the allowable claims, are also allowable.

CONCLUSION

Applicants believe that the application is now in good and proper condition for allowance. Early notification of allowance is earnestly solicited.

Respectfully submitted,

Date: October 4, 2005



Viola T. Kung (Reg. No. 41,131)

HOWREY SIMON ARNOLD & WHITE, LLP
2941 Fairview Park Drive, Box 7
Falls Church, VA 22042
Telephone: (650) 463-8181